



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,415	02/27/2004	Toru Yano	Q80109	4540
65565 7590 12/07/2007 SUGHRUE-265550 2100 PENNSYLVANIA AVE. NW WASHINGTON, DC 20037-3213			EXAMINER TOSCANO, ALICIA	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			12/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/787,415

Applicant(s)

YANO ET AL.

Examiner

Alicia M. Toscano

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7,9 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7,9 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. The declaration submitted 11/14/07 is not signed. Appropriate correction required.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 7 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumazawa (JP 2003-096285) in view of Kuroki (WO 03/006550, US 6984443 is used as an Equivalent English Translation of the WO document).

This rejection is as set forth in the action dated 6/14/07.

3. Claims 1, 7 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumazawa in view of Shinoda (US 5247013).

This rejection is as set forth in the action dated 6/14/07.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumazawa and Kuroki or Kumazawa and Shinoda in further view of Oya (JP 08073628 A).

This rejection is as set forth in the action dated 6/14/07.

Response to Arguments

5. Applicant argues the criticality of the range of D-lactic-co- saccharide is unexpected as evidenced by Table 5 of the specification and the declaration submitted 11/14/07. As such, applicant argues the functional equivalence rejection is improper. Regarding JP '285 v. Shinoda, wherein motivation to include the saccharide resin was to improve the hydrolyzability of the composition, Applicant argues that there is nothing to teach that the addition of said resin to a composition is a result effective variable and that said critical range results in patentability.

Examiner disagrees. Regarding unexpected results the Applicant's data is not convincing. The Examiner directs comparison to Table 2 pg 19, L-lactic blended with D-lactic polymers, Table 3, L-lactic-co-saccharide blended with D-lactic-co- saccharide and Table 4 and 4', L-lactic blended with D-lactic-co- saccharide (inventive).

Table 4 and 4' purportedly shows that addition below 3 wt% and above 25 wt% results in unexpected melting point increase and an unexpected moldability range. Examiner disagrees. That 1 wt% of D-lactic-co- saccharide does not increase the melting point has not been shown to be unexpected. In order to show said result to be unexpected Applicant needs to submit data with (a) 100 wt parts L-lactic blended with 1 wt part saccharide; (b) 100 wt parts L-lactic blended with 1 wt part D-lactic and (c) 100 wt parts L-lactic blended with the D-lactic-co- saccharide. Once said data is submitted the Examiner can properly ascertain whether the results are expected or unexpected. The Examiner notes that one cannot use Table 2 for comparison since the MW/melting points of the L-lactic acid is not the same as that used in Table 4 and 4'. Further,

Tables 2 and 4/4' utilize different lactic acid polymers, one commercially available and one formed in-house. Applicant needs to use the same polymer for proper comparison.

Further regarding the unmoldability of Table 4', said results are not persuasive because the beginning melting point of the L-lactic acid is 30 degrees higher than that in Table 2. Thusly, one expects the melting point to increase with additional D-lactic acid (see Table 3), so since one started with a higher melting point polymer it is not unexpected that the melting point was higher with increasing D-lactic-co- saccharide content. In order to properly ascertain unexpected results Applicant needs to show, (a) 100 wt parts L-lactic; (b) 100 wt parts D-lactic acid; (c) 100 wt parts D-lactic-co- saccharide; and (d-g) mixtures of 100 wt parts L-lactic with both 25 and 30 wt parts D-lactic and D lactic-co- saccharide.

Further regarding Table 2, the wt parts are not commensurate with the other tables, the Examiner would like a full data set exemplifying 100 wt parts L-lactic with 0-100 wt parts D-lactic acid.

Since unexpected results have not been shown, the rejections set forth previously stand.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 1796

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

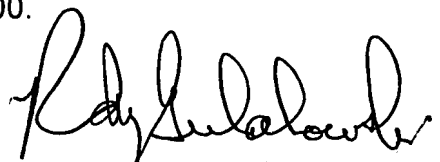
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Toscano whose telephone number is 571-272-2451. The examiner can normally be reached on Monday to Friday 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMT



RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700